

**GENERAL MOTORS LLC  
SAGINAW METAL CASTING OPERATIONS  
FUGITIVE DUST CONTROL PROGRAM**

**Approved by:** \_\_\_\_\_

**Date:** \_\_\_\_\_

This program has been designed to meet all requirements of Act 451, Part 55, Section 5524 and Rules 371 & 372 of the Michigan Department of Environmental Quality – Air Quality Division.

(a) **The Name and Address of the Facility.**

General Motors LLC  
Saginaw Metal Casting Operations  
1629 North Washington Avenue  
Saginaw, MI 48601

(b) **The Name and Address of the Owner or Operator Responsible for Implementation of the Operating Program.**

Ken Fryer, Sr. Environmental Engineer  
Sustainable Workplaces  
(Same Address as Section A above.)

Telephone Number: (248) 534-8611  
Email: Kenneth.fryer@gm.com

(c) **A Map or Diagram of the Facility including the following potential sources of fugitive dust:**

- (1) Approximate location of staging and transfer piles; Figure 1 shows Spent Waste Materials:
  - (i) **Spent Sand Roll-off boxes from SPM and Precision Sand operations.**
- (2) All Outdoor traffic patterns within the facility; Figure 2 shows paved and unpaved roads and parking lots.
- (3) Material Receiving Figure 3:
  - (i) **Sand receiving SPM**
  - (ii) **Sand receiving Precision Sand**

(d) **The location of unloading and transporting operations with pollution control equipment.**

Figure 3 shows the location of sand receiving for the SPM at SMCO ((c)(3)(i)). The bins for this process are controlled by a bin vent collection system. Dust from transporting the core sand is controlled by dust collectors that discharge to the atmosphere through Z05-CC-2.

Figure 3 also shows the location of sand receiving for Precision Sand ((c)(3)(ii)). The bins for this process are controlled by a bin vent collection system. Dust from transporting the core sand is controlled by dust collectors that discharge to the atmosphere through Z03-CC-2.

(e) **A detailed description of the best management practices utilized to achieve compliance with this section, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals, and dust suppressants utilized, and equivalent methods utilized.**

1. "Potential Sources of Fugitive Dust" identified above in Section (c)(3)(i) and (3)(ii), shall be managed in a way that meets Rule 524(3)(b), which states:

*"If particulate collection equipment is operated pursuant to this section, emissions from such equipment shall not exceed 0.03 grains per dry standard cubic foot (0.07 grams per cubic meter)."*

2. "Potential Sources of Fugitive Dust" identified above in Section (c) as (1), , and (3) shall be managed in a way that meets Rule 524(3)(a)(iv), which states:

*"All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying, or other equivalent methods."*

3. All batch loading operations to storage via conveying will limit their potential fugitive dust emissions by limiting the drop heights from the conveyor to the transfer piles. This activity is in accordance to Rule 524 (3)(a)(ii), which states:

*"...Batch loading operations to storage piles specified in subparagraph (i) shall utilize spray systems, limited drop heights, enclosures, or other equivalent methods in accordance with the operating program required in subsection (4)."*

4. Due to their silt contents (1)(i) through (1)(iv) of section (c) "Potential Sources of Fugitive Dust" above, will be managed per Rule 524(3)(c)(iii), which states:

*"Loading trucks so that no part of the load making contact with any sideboard, side panel, or rear part of the load comes within 6 inches of the top part of the enclosure for bulk materials with a silt content of more than 1% but not more than 5%."*

(f) **A test procedure, including record keeping, for testing all waste or recycled oils used for fugitive dust control for toxic contaminants.**

Not applicable; the facility does not use waste, recycled oils, or other hazardous materials for fugitive dust control.

(g) **The frequency of application, application rates, and dilution rates if applicable, of dust suppressants by location of materials.**

Due to the fugitive dust potential produced from travel on the facility's unpaved roadways they will be managed in a way that meets the requirements of Rule 524(4), which states:

*"All fugitive dust sources subject to the provisions of this section shall be operated in compliance with both the provisions of an operating program that shall be prepared by the owner or operator of the source and submitted to the department and with applicable provisions of this section. Such operating program shall be designed to significantly reduce the fugitive dust emissions to the lowest level that a particular source is capable of achieving by the application of control technology that is reasonably available, considering technological and economic feasibility. The operating program shall be implemented with the approval of the department."*

It is SMCO's intent to spray the unpaved roadways when required, during plant operations from the period April through October, except where winter or wet conditions make it impractical or unnecessary to do so. Records of this activity will be maintained by the Environmental Air Engineer. In addition, and to assist the Environmental Air Engineer in determining if unpaved roadways require dust suppression, a monthly inspection of fugitive dust control status of all plant-unpaved roadways will be completed. Records of this inspection will be maintained by the Environmental Air Engineer.

**(h) The frequency of cleaning paved traffic pattern roads and parking facilities.**

All heavily traveled roadways are paved at the SMCO facility and will be managed in a way that meets the requirements of Rule 524(4), which states:

*"All fugitive dust sources subject to the provisions of this section shall be operated in compliance with both the provisions of an operating program that shall be prepared by the owner or operator of the source and submitted to the department and with applicable provisions of this section. Such operating program shall be designed to significantly reduce the fugitive dust emissions to the lowest level that a particular source is capable of achieving by the application of control technology that is reasonably available, considering technological and economic feasibility. The operating program shall be implemented with the approval of the department."*

The facility will wet sweep paved roadways and parking lots as necessary. This will be audited and recorded monthly by SMCO Environmental Engineer.

**(i) Other information as may be necessary to facilitate the department's review of the operating program.**

The above described program meets all criteria of Section 5524.

**Attachment Summary**

Figure 1 - Spent Waste Materials

Figure 2 - Outdoor Traffic Patterns

Figure 3 - Unloading and Transporting Operations – SMCO

### Change Summary

1. Removed Items that have been decommissioned due to the closure of the Iron Casting Line 10-08
2. Modified requirement for sweeping from bi-weekly as required 10-08
3. Modified employee lot sweeping requirements from monthly to on demand 10-08
4. Modified all references to areas no longer GM property. 10-1-10
5. Reviewed and modified to include new RWTF and remove old. Naming of GM LLC 7-15-11
6. Reviewed and modified to include new business activities and remove old operation nomenclature 11-22-13.
7. Reviewed, modified and renumbered to remove the Line 6 Operations that ceased operations 9-29-2017.
8. Removed Line 6 and RWTF operations; Updated Contact info; Condensed language.

# 2020 Review

General Motors, LLC  
Saginaw Metal Casting Operations  
Fugitive Dust Plan

**Figure 1 Spent Waste Materials – SMCO**





Figure 2 Outdoor Traffic Patterns



**Legend**

- Unpaved (Red line)
- Racer Trust Easement (Brown line)
- Parking Lot (Red hatched area)
- Paved (Yellow line)

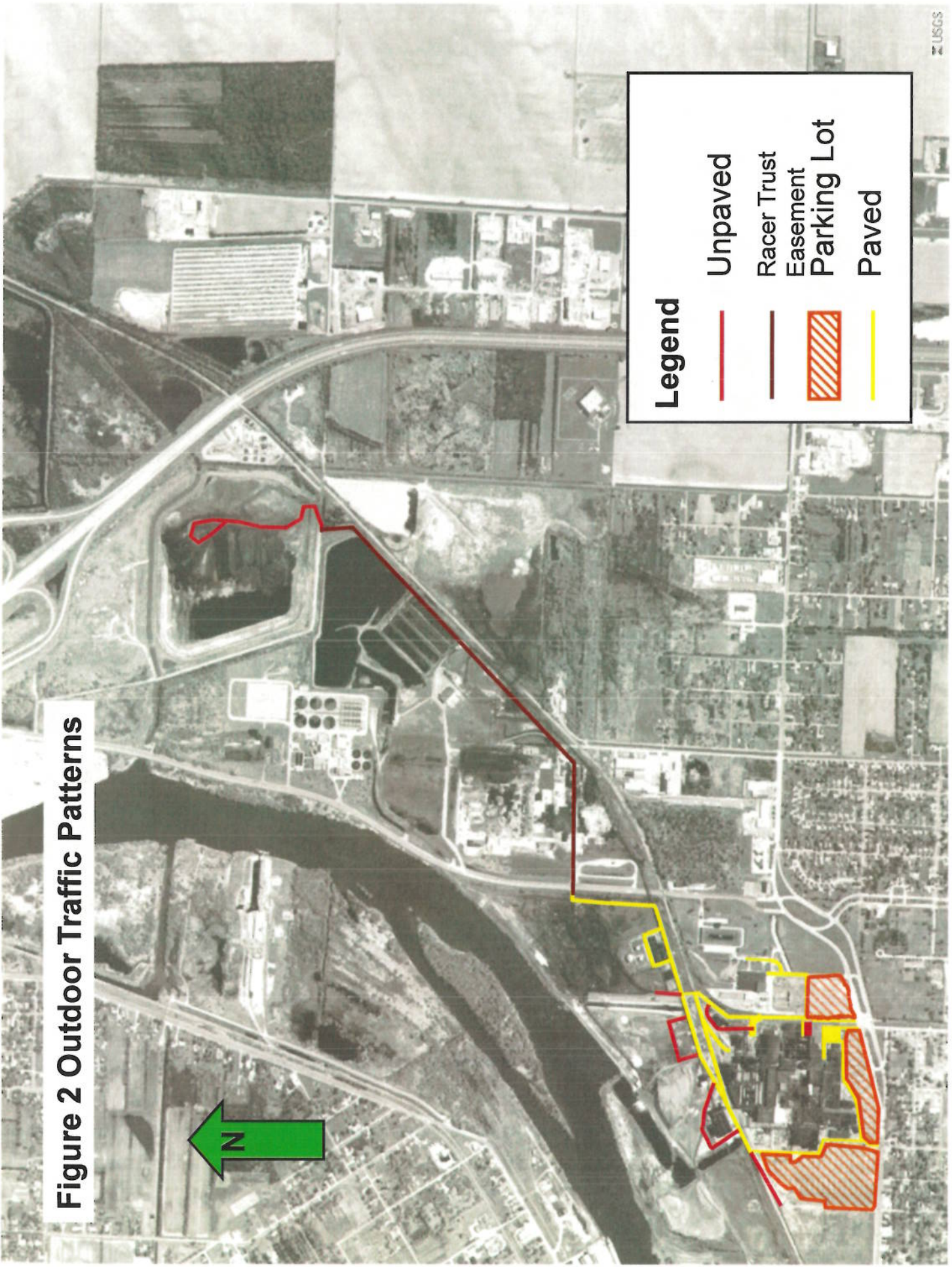




Figure 3 Material Unloading and Transporting Operations - SMCO

